

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)APPLICANT
Harry RosenbergPRIORITY FILING DATE
November 20, 2000PRIORITY GROUP
2818US PRO
1050 1049 1048 1047 1046 1045 1044 1043 1042 1041 1040 1039 1038 1037 1036 1035 1034 1033 1032 1031 1030 1029 1028 1027 1026 1025 1024 1023 1022 1021 1020 1019 1018 1017 1016 1015 1014 1013 1012 1011 1010 1009 1008 1007 1006 1005 1004 1003 1002 1001 01/15/02

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
PD	AA	4,727,928	03/1988	De Vynck et al.	—	—	—
↑	AB	5,108,490	04/1992	Yoshimura	—	—	—
	AC	5,232,485	08/1993	Yoshimura et al.	—	—	—
	AD	5,635,146	06/1997	Singh, et al.	—	—	—
↓	AE	3,933,474	01/20/76	Ham et al	—	—	—
	AF	5,442,978	08/22/95	Hildreth et al	—	—	—
	AG	6,010,676	01/04/00	Singh et al	—	—	—
↓	AH	4,082,579	04/1978	Masumoto et al	—	—	—
PD	AI	4,673,554	06/1987	Niwa et al	—	—	—
	AJ						
	AK						
	AL						

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
PD	AM 19841774	03/1999	GER (translation of abstract only)	—	—		
↑	AN 03-197640	08/1991	JPN (translation of abstract only)	—	—		
↓	AO WO96/20892	07/1996	PCT	—	—		
PD	AP JP403197640	08/1991	Japan	—	—		
	AQ						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

PD ↑	AR	Tittering, et al., "The Production and Fabrication of Tantalum Powder," Symposium on Powder Metallurgy, 1954, pgs. 11-18.					
			Michaluk et al., "Factors Affecting the Mechanical Properties and Texture of Tantalum," Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pgs. 205-207.	—	—	X	X
	AS	Tripp et al., "The Production of Tantalum by the Sodium Reduction Process," Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pgs. 23-27.					
			Fukang, et al., "Tantalum Industry in China," Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pgs. 287-292.	—	—	X	X
PD ↓	AT	Eckert, "The Industrial Application of Pyrometallurgical, Chlorination and Hydrometallurgy for Producing Tantalum Compounds," Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pgs. 55-61.					
			Suri, et al., "Studies on Tantalum Extraction," Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pgs. 39-46.	—	—	X	X

EXAMINER

PHUC T. DANG

DATE CONSIDERED

11/12/2002

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)APPLICANT
Harry RosenbergPRIORITY FILING DATE
November 20, 2000PRIORITY GROUP
2818

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AM							
	AN							
	AO							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

P7 ↑	AP	Albrecht, et al., "Modern Extraction of Tantalum and Niobium with Special Emphasis on the Production of High Purity Compounds," Conference Proceedings of Inter.Symp. On Tantalum and Niobium, 11/1988, Brussels, Belgium, 22 pages.
		Aichert et al., "Progresses in the Economical Production of Very Clean Refractory Metals and Alloys by Electron Beam Melting," Conference Proceedings on Progress in the Economical Production of Very Clean Refractory Metals and Alloys, 05/1985, Reutte, Austria, pages 863-877.
P8 ↓	AQ	Pierret et al., "Operation of Electron Beam Furnace for Melting Refractory Metals" page 208-217, Conference and date not known.
		Nair, et al., "Production of Tantalum Metal by the Aluminothermic Reduction of Tantalum Pentoxide," Journal of the Less-Common Metals 41 (1974) pgs. 87-95, The Netherlands.
P9 ↓	AR	Klopp, et al., "Purification Reactions of Tantalum During Vacuum Sintering," Transactions of the Metallurgical Society of AIME, Vol. 218, 12/1960, pgs. 971-977.
		Rolsten, "Iodide Metals and Metal Iodides," John Wiley & sons, Inc., New York-London, 1961 pgs. 8-17 and 110-119.

EXAMINER

PHUC T. DANG

DATE CONSIDERED

11/12/2002

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)APPLICANT
Harry RosenbergPRIORITY FILING DATE
November 20, 2000PRIORITY GROUP
2818

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
PD	AK	JP-2000212678-A	08/2000	NIHA				
PD	AL	JP-362259448-A	11/1987	Chisato Hashimoto				

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

PD	AM	Jain et al., "Pilot Plant Production of Capacitor Grade Tantalum Powder," Transactions of The Indian Institute of Metals, 12/1971, pgs. 1-8.
		Crockett, et al., "Niobium (Columbium) and Tantalum," International Strategic Minerals Inventory Summary Report, pgs. 1-21 and 34-37.
	AN	Kononov, et al., "Electrorefining in Molten Salts - An Effective Method of High Purity Tantalum, Hafnium an Scandium Metal Production," Journal of Alloys and Compounds 218 (1995), pgs. 173-176.
		Bose, et al., "Preparton of Capacitor Grade Tantalum Powder," Transactions of The Indian Institute of Metals, 06/1970, pgs 1-5.
	AO	Korinek, "Tantalum - An Overview," Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pgs. 3-15.
		Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pg. 240.
PD	AP	Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pg. 274.

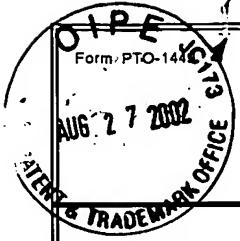
EXAMINER

PHUC T. DANG

DATE CONSIDERED

11/12/2000

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form PTO-144

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET
34593-CON1

SERIAL NO.
10/053,201

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)

APPLICANT
Harry Rosenberg et al

FILING DATE
January 15, 2002

GROUP
2818

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

TECHNOLOGY CENTER 2800
AUG 30 2002
RECEIVED

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
PD	AJ	JP 62-297463	12/1987	Japan			X	
	AK							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

	AL	
	AM	
	AN	
	AO	
	AP	
	AQ	
	AR	
	AS	
	AT	
	AU	

EXAMINER

PHUC T. DANG

DATE CONSIDERED

11/12/02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET
34593-CON1

SERIAL NO.
10/053,201

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)

APPLICANT
Harry Rosenberg et al

FILING DATE
January 15, 2002

GROUP
2818

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
PD	AA	6,348,113	02/2002	Michaluk et al	—	—	—
	AB	6,323,055	11/2001	Rosenberg et al	—	—	—
	AC	6,348,139	02/2002	Shah et al	—	—	—
	AD	6,331,233	12/2001	Turner	—	—	—
	AE	5,837,123	11/1998	Wong et al	—	—	—
	AF	5,707,599	01/1998	Northway	—	—	—
	AG	5,722,034	02/1998	Kambara	—	—	—
PD	AH	5,331,233	09/1993	Kumar	—	—	—
	AI				—	—	—

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclas	Translation	
						Yes	No
PD	AJ	WO 00/31310	02/00	PCT	—	—	—
	AK						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

PD	AL	Albrecht, et al., "Modern Extraction of Tantalum and Niobium with Special Emphasis on the Production of High Purity Compounds," Conference Proceedings of Inter.Symp. On Tantalum and Niobium, 11/1988, Brussels, Belgium, 22 pages.
		Aichert et al., "Progresses in the Economical Production of Very Clean Refractory Metals and Alloys by Electron Beam Melting," Conference Proceedings on Progress in the Economical Production of Very Clean Refractory Metals and Alloys, 05/1985, Reutte, Austria, pages 863-877.
	AN	Pierret et al., "Operation of Electron Beam Furnace for Melting Refractory Metals" page 208-217, Conference and date not known.
		AO Nair, et al., "Production of Tantalum Metal by the Aluminothermic Reduction of Tantalum Pentoxide," Journal of the Less-Common Metals 41 (1974) pgs. 87-95, The Netherlands.
	AP	Klopp, et al., "Purification Reactions of Tantalum During Vacuum Sintering," Transactions of the Metallurgical Society of AIME, Vol. 218, 12/1960, pgs. 971-977.
		AQ Rolsten, "Iodide Metals and Metal Iodides," John Wiley & sons, Inc., New York-London, 1961 pgs. 8-17 and 110-119.
	AR	Jain et al., "Pilot Plant Production of Capacitor Grade Tantalum Powder," Transactions of The Indian Institute of Metals, 12/1971, pgs. 1-8.
		AS Crockett, et al., "Niobium (Columbium) and Tantalum," International Strategic Minerals Inventory Summary Report, pgs. 1-21 and 34-37.
PD	AT	Kononov, et al., "Electrorefining in Molten Salts - An Effective Method of High Purity Tantalum, Hafnium an Scandium Metal Production," Journal of Alloys and Compounds 218 (1995), pgs. 173-176.
		AU Bose, et al., "Preparton of Capacitor Grade Tantalum Powder," Transactions of The Indian Institute of Metals, 06/1970, pgs 1-5.

EXAMINER

PHUC T. DANG

DATE CONSIDERED

1/12/2002

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
34593-CON1

SERIAL NO.
10/053,201

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)

APPLICANT
Harry Rosenberg et al

FILING DATE
January 15, 2002

GROUP
2818

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclas s	Translation	
						Yes	No
	AM						
	AN						
	AO						
	AP						
	AQ						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

RD	AR	Korinek, "Tantalum - An Overview," Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pgs. 3-15.
		Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pg. 240.
	AT	Symposium jointly sponsored by SCAMP and SMD (RMMC), 125th TMS Annual Meeting and Exhibition, Anaheim, California 02/1996, pg. 274.
		Cabot Performance Materials, Material Evaluation Report, March 25, 1998, Ingot Number T843A
RD	AV	Cabot Performance Materials, Material Evaluation Report, February 2, 1999, Ingot Number TD961
		R. H. Burns et al.: "Evolution of applications of tantalum", in proceedings "Tantalum", edited by E. Chen et al., published by TMS, 1996, pp. 273-285.

EXAMINER

PHUC T. DANG

DATE CONSIDERED

5/12/2002

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				ATTY. DOCKET NO. 34593-CON1	SERIAL NO. 10/053,201		
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Harry Rosenberg et al			
				FILING DATE January 15, 2002	GROUP 2818		
U. S. PATENT DOCUMENTS							
*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
AA							
AB							
AC							
AD							
AE							
AF							
FOREIGN PATENT DOCUMENTS							
	Document Number	Date	Country	Class	Subclas s	Translation	
AG						Yes	No
AH							
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
PD	AI	G. Jun et al.: "Low Temperature Deposition of TaCN Films Using Pentakis (Diethylamido) Tantalum", in MRS Symposium Proceedings, Vol. 427: Advanced Metallization for Future ULSI, edited by K. N. Tu et al., published by MRS, 1996, pp. 349-354.					
		AJ	J. O. Olowolafe et al.: "The Effect of Ta to Si Ratio on Magnetron Sputtered Ta-Si-N Thin Films", J. Electronic Materials, Vol. 28, No. 12, 1999, pp. 1399-1402.				
	AK		World Wide Website: http://www.pwbrc.org/bmr/ew.htm , "Electrowinning", 09/06/2000				
		AL	F. Lantelme et al.: "Electrodeposition of Tantalum in NaCl-KCl-K ₂ TaF ₇ Melts", J. Electrochem. Soc., Vol. 139, No. 5, 1992, pp. 1249-1255.				
	AM		Trinitech International Inc., Material Evaluation Report, April 13, 1994, Lot No. 6-15-2.				
		AN	G. Li et al.: "Electrochemical Reduction of Tantalum in Molten NaCl-KCl-K ₂ TaF ₇ ", Transactions of Nfsoc., Vol. 2, No. 3, 1992, pp. 64-68.				
	AO		A. Girginov et al.: "Electrodeposition of Refractory Metals (Ti, Zr, Nb, Ta) From Molten Salt Electrolytes", J. Applied Electrochemistry, 25, 1995, pp. 993-1003.				
		AP	M. Bachter et al.: "Electrochemical and Simultaneous Spectroscopic Study of Reduction Mechanism and Electronic Conduction During Electrodeposition of Tantalum in Molten Alkali Chlorides", Ber. Bunsenges. Phys. Chem. 99, No. 1, 1995, pp. 21-31.				
	AQ		L.P. Polyakova et al "Secondary Processes During Tantalum Electrodeposition in Molten Salts, J. Applied Electrochemistry 22, 1992, pp.628-637.				
		AR	C. K. Gupta: "Extractive Metallurgy of Niobium, Tantalum and Vanadium", International Metals Review, Vol. 29, No. 6, 1984, pp. 405-444.				
PD	AS		World Wide Website, http://www.electrometals.com.au/EMEWTechProfile.html , Electrometal Technologies Limited, EMEW Electrowinning Technology Profile, 1999				
		AT	Derwent abstract of WO-200031310-A1, Huber et al, 6/2/00, Derwent Acc-No. 2000-441864				
EXAMINER PHUC T. DANG				DATE CONSIDERED 11/12/2002			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							